DOCUMENT RESUME

ED 250 523 CE 040 052

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TITLE Excellence in Vocational Teacher Education: Focus on the United States.
PUB DATE Dec 84
NOTE 19p.; Paper presented at the International Conference of Vocational Educators, American Vocational Association Convention (78th, New Orleans, LA, December 1984).
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Competency Based Teacher Education; Demonstration Programs; Educational Quality; *Models; Postsecondary Education; *Program Improvement; Secondary Education; State Programs; Teacher Certification; *Teacher Education; *Teacher Education Programs; Teacher Qualifications; *Vocational Education; *Vocational Education Teachers
IDENTIFIERS Arkansas; Pennsylvania; United States

ABSTRACT

Despite the many criticisms that have been made of vocational education teacher preparation, the field has many strengths that can serve as a base on which to build excellent programs. Six examples of excellence are pointed out: (1) important vocational teacher competencies have been identified and verified; (2) high quality performance-based materials that address the professional competencies have been developed; (3) performance-based delivery strategies exist; (4) technical competency tests and procedures exist for most occupational areas; (5) needed instructional technology is available, and (6) many model programs of teacher education and staff development have been identified. Two states that have such model programs are Arkansas and Pennsylvania. Changes in five major areas could result in substantial and very significant improvements in the preparation of vocational teachers in the United States and in the quality of the teachers in secondary and postsecondary schools. These changes include the revision of state certification/local employment requirements, the redesign of vocational teacher education, the professionalization of vocational teaching, the use of research and development findings and products, and the adequate funding of vocational teaching and professional development activities. Although reviewing these achievements and needs is easy, making the changes called for is not. However, implementing is necessary to achieve greater excellence. (KC)

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Prepared for

International Conference of Vocational Educators

American Vocational Association Conference

New Orleans, Louisiana

1984

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EXCELLENCE IN VOCATIONAL TEACHER EDUCATION: FOCUS ON THE UNITED STATES

Robert E. Norton

Report after report on excellence in education, vocational education, and teacher education seems to dwell only on what is wrong with education. Joyce and Cliff (1984, p. 5) appropriately said "the field [of teacher education] is not just surrounded by critics, it is inhabited by them." This paper will start by first looking at some of the examples of excellence in vocational teacher education that already exist. This will include a brief look at two states that are already operating excellent programs of teacher education and staff development. Then, we will look at five major areas needing attention if we are to achieve greater excellence in vocational teacher education.

While it is true that enrollments in vocational teacher education programs have declined and that shortages of vocational teachers are already being experienced throughout the country in several occupational areas (Frantz, 1984, p. 47), we should look at the total picture. Most of the many reports on the condition of education that have been bombarding us with regularity during the past few years for some reason fail to recognize or describe the many strengths that exist. Let us proudly recognize our strengths and then proceed to build upon them, rather than hover in despair as many of our critics would like. If we aren't careful to differentiate between what is excellent and what is not, we may reform the wrong aspects of our programs in our eagerness to make everything better.

What Examples of Excellence in Vocational Teacher Education in the United States Already Exist?

Many items were considered as examples of excellence in vocational teacher education in the United States. However, after reviewing many reports and conferring with several vocational educators, the following six examples were selected as the best. The author would quickly admit that other features, such as the teacher education internship programs operating in some states, could also be described as exemplary. He would also confess to the fact that some of the approaches chosen and described here are not being used well by some states and teacher training institutions.

Important vocational teacher competencies have been identified and verified. The question "what teaching skills are needed by successful vocational teachers?" has been well answered by Cotrell (1972) and many others who have conducted competency research studies. Study after study has identified and confirmed the planning, execution, evaluation, management, and other pedagogical skills needed by vocational teachers.

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Many states have also supported rigorous studies of the technical subject-matter competencies needed by teachers in the various occupational areas. Of course, these studies (technical and pedagogical) need to be periodically updated as industrial processes and societal emphases change. To provide a workable and cost-effective process for competency identification and verification, staff at the National Center have refined and recommended the DACUM process (Norton, in process).

High-quality performance-based materials that address the professional competencies have been developed. By now most teacher educators are well aware of the comprehensive set of over 125 performance-based teacher education (PBTE) modules developed and extensively field tested by the National Center for Research in Vocational Education. They address pedagogical competencies in 13 major categories and are being extensively used in preservice and inservice teacher education programs in the United States and internationally (Norton, 1983). The original 100 modules are being updated and three new categories have been added to the series. For a current listing of titles and source information, see Attachment A.

Performance/competency-based delivery strategies and techniques exist. Extensive experience gained during the field testing of the PBTE modules with over 40 institutions provided information that National Center staff used to prepare a Guide to the Implementation of Performance-Based Teacher Education and a Resource Person Guide to Using Performance-Based Teacher Education Materials. These materials, in addition to slide/tape presentations and other supportive documents that describe how many secondary, postsecondary, and teacher education institutions are successfully using PBTE strategies and techniques, are widely available.

Technical competency tests and procedures exist for most occupational areas. The National Occupational Competency Testing Institute (NOCTI) is a nonprofit educational consortium of states that has developed high-quality teacher occupational competency examinations in over 40 main fields of employment. The NOCTI exams for each occupation contain two parts: a written test that is concerned with knowledge of the occupation; and a performance test that examines selected manipulative skills of the occupation.

The NOCTI tests do not measure teaching skills. Instead they focus on the technical knowledge, psychomotor skills, understandings, and analytical abilities that are normally required of an individual for successful practice in the occupation. Currently, 46 states and the District of Columbia support this important technical competency testing program for teachers.

Needed instructional technology exists. Note that the emphasis here is on the fact that the needed technology--microcomputers, videotaping equipment, television, satellite teleconferencing, computer-assisted instruction, and various other media--exists. While some institutions are putting this instructional media to good use, many others are not or are doing so only on a limited basis. We have tremendous capacity here, but we have yet to put it to maximum practical use.

Many model programs of teacher education and staff development exist. While there is always danger involved in selecting model programs, this author has chosen to do so anyway. Before being attacked by anyone, the author wants to acknowledge that many other states and institutions also have some excellent programs. Time and space permit only the briefest description of the programs offered by the two states selected: Arkansas and Pennsylvania.

The state of Arkansas recently established a statewide performance-based professional development program for all its postsecondary instructors. Participation in the program is a condition of employment. A career ladder system provides incentives and commensurate salaries for teachers as they advance professionally from instructor, to senior instructor, to master instructor. Certification requires the achievement and maintenance of both professional and technical skills. The delivery system utilizes PBTE concepts and materials and a differential staffing pattern (see Attachment B or the Instructor Certification Handbook for more details).

The state of Pennsylvania has established four comprehensive Professional Personnel Development Centers to serve various geographic regions of the Commonwealth. The centers, located at Indiana University of Pennsylvania, Pennsylvania State University, Temple University, and the University of Pittsburgh, all offer field-based PBTE programs that serve teacher trainees (interns) on either a preservice or an inservice basis.

As in Arkansas, participation is a condition of employment in Pennsylvania. All secondary teachers must be certified for the subject area being taught within three years of beginning employment as an intern. Delivery is almost totally field-based; individual conferences and small-group seminars are conducted at the school where the intern is employed (inservice) or assigned (preservice). A differential staffing scheme--involving a university program coordinator, a field resource person (FRP), and a school resource person (SRP)--is used. A variety of instructional methods are used, including (1) directed, individualized instruction, (2) team teaching, (3) helping conferences, (4) self-evaluation, (5) videotaping, and (6) assessment in an actual teaching situation (for more details, see Attachment C).

Areas Needing Attention If Greater Excellence in Vocational Teacher Education Is to Be Achieved

Changes in five major areas, if properly addressed, could result in substantial and very significant improvements in the preparation of vocational teachers in the United States and in the quality of the teachers in our secondary and postsecondary schools. The five areas are presented, one by one, first in outline and then with a brief supporting narrative.

Revise state certification/local employment requirements, including:

- Do away with permanent certification.
- Require that certificate renewal involve (1) periodic technical update, (2) periodic professional update, and (3) satisfactory performance evaluations.

- Require competency/performance testing of (1) technical skills and (2) professional skills.

In this day and age, there appears little rationale for granting permanent certification to any teacher, and especially to any vocational teacher, when technological advances are occurring at a rapid pace in most fields. Certification granted for a three- or five-year period should be renewed only upon submission of documentation that the teacher has made a reasonable effort to keep up-to-date both technically and professionally and has been receiving satisfactory performance evaluations from his/her supervisor.

While many states have already gone to use of the NOCTI exams or equivalent types of technical performance and knowledge testing, other states should follow suit. How can we rationally expect our students to perform well in their occupational pursuits if we are not sure our teachers have the technical skills and knowledge required? It also follows that a teacher's professional skills should be carefully evaluated in actual teaching situations--as many states and teacher education institutions have already done--rather than by means of paper-and-pencil tests or through peer simulations. If we are going to implement competency-based education in our vocational-technical programs and require performance tests of those students--as most states are recommending--is it not time to practice what we are preaching when we prepare and evaluate our teachers?

Redesign vocational teacher education, including:

- Establish more CBTE/PBTE programs.
- Establish more CBSD (competency-based staff development) programs.
- Establish more field-based outreach programs.
- Aggressively recruit high-quality students.
- Pay more attention to technical updating.
- Utilize new instructional technology.
- Provide first-year teacher internships or other follow-up services.

While many institutions and states implemented CBTE/PBTE programs in the middle to late 1970s, and others such as Arkansas, Alaska, and Virginia have more recently implemented such programs, many teacher education institutions have implemented such programs only partially or not at all. Adams et al. (1980) conducted an in-depth study of two universities that have fully operational PBTE programs and conducted phone interviews with 71 other persons using PBTE concepts and materials. They reported three types of positive effects, as follows: (1) effects on the instructer training programs, (2) effects on the vocational instructors, and (3) effects on vocational education classrooms and students.

According to this study, PBTE has been especially effective in changing instructor training programs. It has accomplished the following:

- Increased the accountability of instructor training programs

- Increased instructors' access to instructor training by providing self-contained instruction especially useful in rural and/or isolated areas
- Increased the flexibility of instructor training in terms of getting the right training to the right instructor at the right time
- Increased the productivity of instructor training programs by shortening the time required to certify vocational teachers
- Reduced the variability of and added cohesiveness to the content of vocational instructor training curricula through standardization of the skills vocational instructors are required to master
- Significantly changed the role of the university trainer from a university-based classroom lecturer to a field-based learning facilitator working with instructors on a small-group and one-to-one basis

The effects of PBTE on vocational teachers and instructors are as follows:

- Increased competency in teaching, especially in the areas of instructional planning, organizing content into units of instruction, student reinforcement, individualizing instruction, and student performance evaluation
- Increased instructors' responsibility for their own learning and their ability to be self-evaluative
- Increased the instructors' convenience in obtaining certification.
- Increased instructors' personal contact with instructor training faculty
- Increased instructors' confidence in themselves, because they are more certain of what they can do

Vocational education classrooms and students, too, have been affected by PBTE. It has contributed to the following:

- Improved communication between training institutions and local school districts
- Increased use of competency-based techniques by instructors with their own students because instructors teach the way they are taught
- Improved performance of local school administrators in evaluating instructors

Smith and Nagel (1979), working with competency-based education at San Diego State University, reported that once the individual instructor is successful in specifying competencies, looking at performance, and developing a one-to-one relationship with students, "there is no turning back."

CBSD programs are similar to PBTE programs except that they operate within the confines of the employing institution rather than in a university setting. Members of the NATTS (National Association of Trade and Technical Schools) have been notably successful in using this approach to provide inservice training for their professional staff.

Many institutions in the United States and other countries are realizing the importance of establishing more field-based, outreach programs. It makes more sense for one resource person to travel to outlying schools than to have 15 or 20 teachers drive to a distant university campus. Notable examples of this type of outreach program are occurring in Alaska, Pennsylvania, Florida, Arkansas, and New York.

Report after report has been critical of the caliber of student being enrolled in vocational teacher preparation programs. While this is a multi-faceted problem involving low salaries, low prestige, and other factors, few institutions aggressively recruit high-quality students for their colleges of education. Boyer (1983, p. 173) notes the hypocrisy of colleges calling for excellence while "spending several hundred million dollars recruiting athletes and spending virtually no time or money recruiting prospective teachers."

Little further needs to be said about the importance of technical updating, but much more needs to be done about it. Excellent programs of teacher education will go out of their way to facilitate vocational teachers' having the needed opportunities for updating their technical skills. Wonacott and Hamilton (1983) identified six delivery techniques for providing technical update skills to secondary and postsecondary teachers.

More teacher education institutions should be making more extensive use of the new instructional technologies available. Videotaping has proven itself an indispensable tool when it comes to teacher self-evaluation.

Finally, teacher educators should provide, without exception, some type of first-year follow-up internship for new teachers. That first year is a major challenge, as any of us who have gone through it well remember. Providing special attention to beginning teachers has frequently been discussed in the literature, but all too often the funds needed are unavailable or other reasons prohibit this type of assistance from being routinuely offered. California, however, has implemented a mentor teacher program on a large scale. Mentors are exemplary teachers who, in addition to spending the majority of their time teaching, will also provide inservice education to new and experienced teachers.

<u>Professionalize vocational teaching, including</u>:

- Establish career ladders.
- Require annual professional development.
- Involve teachers more in decision making.
- Make all teachers' contracts 12 months.

- Identify and publicly recognize master teachers.
- Implement performance-based compensation.

Among the most pertinent recommendations made by the report, A Nation at Risk (1983), is the creation of a career path for teachers, from beginner to master, with advancement and salary based on achievement and teaching effectiveness. Arkansas has implemented a model program of this type as mentioned earlier. Other states are likely to follow suit.

The idea of requiring some type of annual professional development is relatively new. The author has suggested to numerous colleagues that if we really want to achieve excellence, all teachers should be employed on a 12-month contract with the expectation that 10 months will be spent teaching. One month would then be used for professional and/or technical updating, and one month used for vacation.

An article in Teacher Education Reports (July 19, 1984) quotes Dr. Dean Corrigan, dean of the College of Education at Texas A & M University, as saying that any proposal for curriculum reform that expects to succeed "must include funds for inservice education" for the personnel affected by the reform. Dr. Corrigan cites states such as New York, where the school year will be lengthened by 20 days, with 10 days of that time "used for mandatory inservice teacher training."

Another means of professionalizing vocational teaching would be to involve teachers more in the administrative decisions of the school, especially where those decisions impact directly on the instructional process. It would seem that we must also identify and publicly recognize our master teachers. California is doing this through the designation of exemplary teachers as mentors. And Pennsylvania, through its "excellence in teaching award program," will annually be recognizing up to 5 percent of its teachers as outstanding educators.

Arkansas and many other states are also beginning to implement a performance-based type of compensation. As Arkansas teachers advance up the career ladder, so do their salaries. The California exemplary mentor teachers will receive $4,000 stipends starting in 1984-85, and Pennsylvania's outstanding educators will each receive $2,000 awards. There is no doubt that these types of financial rewards will have a positive impact on the image of teaching and the performance of our teachers. One word of caution, however; we must be careful to identify appropriate criteria for the selection of these mentor and master teachers. It may not be easy to achieve consensus on a definition of excellence, but such agreement will be vital to the selection process.

Conduct and use research and development findings and products, including:

- Disseminate and utilize research findings such as--
  - time-on-task studies,
  - learning conditions research, and
  - competency studies.

- Utilize field-tested curriculum materials.
- Devise better measures of teacher effectiveness.
- Study the influence of organizational climate on teacher performance.
- Analyze the influence of instructional systems such as CBE on teacher performance.

Hughes (1984) states that "reports of research on teaching fill volumes." The problem is not so much a lack of research but our failure to utilize and to teach our teachers how to utilize the findings already available. A new text on the effective use of research findings has recently become available (Hosford, 1984). Hosford is appropriately concerned with ways of translating new knowledge into common practice. In Using What We Know About Teaching, Hosford examines and presents methods for gaining knowledge, transmitting that knowledge into practice, and achieving artistic levels of teaching.

While a lot of useful research has been done, there is still plenty of room for improvement in some areas. We still need to design better and more efficient measures of teacher effectiveness, to analyze the influence of organizational climate on teacher performance, and to study the impact of new instructional systems such as CBE on teacher performance and student learning.

We must also devise ways of overcoming the NIH (not invented here) syndrome. Too many good and excellent curriculum materials are rejected or never seriously considered because someone else developed them. The unnecessary duplication of curriculum development efforts is costly and terribly inefficient.

Fund vocational teaching and professional development adequately, including:

- Make teachers salaries comparable with those of industry.
- Allot adequate funds for inservice education (both technical and professional).
- Provide grants, scholarships, and loans for preservice and inservice teachers.

If we want to recruit high-quality students into vocational teacher education programs and, later, to keep them teaching in our vocational classrooms, we must find a means of making teachers' salaries comparable with those of similar persons employed by industry. Many excellent teachers who have families to support and who want to enjoy a higher standard of living simply cannot currently afford to remain in public vocational teaching. It appears that money for improving teachers' salaries will need to come from the local and state levels rather than from the federal government. If we really want excellence in teaching, we need top-notch personnel and must be willing to pay just compensation for their services.

We must also allocate--at the state and local levels--adequate funds (as well as time) for top professional and technical inservice education of teachers on a regular basis. This type of inservice training, which is so important to maintaining the proficiency of inservice teachers, will not happen unless we find ways to finance it.

Finally, moneys are also needed for grants and scholarships to entice high-quality students into vocational teaching. If we can offer so many grants and scholarships to football players, we ought to be able to do the same for promising prospective teachers. It appears that through the recently passed Talented Teacher Act, which authorizes $86 million for the Carl V. Perkins Scholarship Program for prospective teachers, some federal funds will soon be available for this purpose. We should also seek to make available low-cost and even forgivable loans to preservice and inservice teachers who promise to teach for a specified number of years after receiving the loan. While money is not the only answer to achieving excellence, it can certainly be of great help in many ways.

Summary

We have reviewed some of the examples of excellence in vocational teacher education that already exist, and we have considered some of the steps that need to be taken if we are to achieve even greater excellence in vocational education. We have also looked briefly at what two states are already doing to achieve excellence in their teacher preparation programs. Providing a review of our achievements and needs is relatively easy. What is not easy is to make all or even most of the changes called for. But if we are to achieve greater excellence, we must initiate decisive action at several levels to make the significant changes required.

ATTACHMENT A

Titles of the National Center's Performance-Based Teacher Education Modules

Category A: Program Planning, Development, and Evaluation

- A-1 Prepare for a Community Survey
- A-2 Conduct a Community Survey
- A-3 Report the Findings of a Community Survey
- A-4 Organize an Occupational Advisory Committee
- A-5 Maintain an Occupational Advisory Committee
- A-6 Develop Program Goals and Objectives
- A-7 Conduct an Occupational Analysis
- A-8 Develop a Course of Study
- A-9 Develop Long-Range Program Plans
- A-10 Conduct a Student Follow-Up Study
- A-11 Evaluate Your Vocational Program

Category B: Instructional Planning

- B-1 Determine Needs and Interests of Students
- B-2 Develop Student Performance Objectives
- B-3 Develop a Unit of Instruction
- B-4 Develop a Lesson Plan
- B-5 Select Student Instructional Materials
- B-6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

- C-1 Direct Field Trips
- C-2 Conduct Group Discussions, Panel Discussions, and Symposiums
- C-3 Employ Brainstorming, Buzz Group, and Question Box Techniques
- C-4 Direct Students in Instructing Other Students
- C-5 Employ Simulation Techniques
- C-6 Guide Student Study
- C-7 Direct Student Laboratory Experience
- C-8 Direct Students in Applying Problem-Solving Techniques
- C-9 Employ the Project Method
- C-10 Introduce a Lesson
- C-11 Summarize a Lesson
- C-12 Employ Oral Questioning Techniques
- C-13 Employ Reinforcement Techniques
- C-14 Provide Instruction for Slower and More Capable Learners
- C-15 Present an Illustrated Talk
- C-16 Demonstrate a Manipulative Skill
- C-17 Demonstrate a Concept or Principle
- C-18 Individualize Instruction
- C-19 Employ the Team Teaching Approach
- C-20 Use Subject Matter Experts to Present Information
- C-21 Prepare Bulletin Boards and Exhibits
- C-22 Present Information with Models, Real Objects, and Flannel Boards
- C-23 Present Information with Overhead and Opaque Materials
- C-24 Present Information with Filmstrips and Slides
- C-25 Present Information with Films
- C-26 Present Information with Audio Recordings
- C-27 Present Information with Televised and Videotaped Materials
- C-28 Employ Programmed Instruction
- C-29 Present Information with the Chalkboard and Flip Chart
- C-30 Provide for Students' Learning Styles

Category D: Instructional Evaluation

- D-1 Establish Student Performance Criteria
- D-2 Assess Student Performance: Knowledge
- D-3 Assess Student Performance: Attitudes
- D-4 Assess Student Performance: Skills
- D-5 Determine Student Grades
- D-6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

- E-1 Project Instructional Resource Needs
- E-2 Manage Your Budgeting and Reporting Responsibilities
- E-3 Arrange for Improvement of Your Vocational Facilities
- E-4 Maintain a Filing System
- E-5 Provide for Student Safety
- E-6 Provide for the First Aid Needs of Students
- E-7 Assist Students in Developing Self-Discipline
- E-8 Organize the Vocational Laboratory
- E-9 Manage the Vocational Laboratory
- E-10 Combat Problems of Student Chemical Use

Category F: Guidance

- F-1 Gather Student Data Using Formal Data-Collection Techniques
- F-2 Gather Student Data Through Personal Contacts
- F-3 Use Conferences to Help Meet Student Needs
- F-4 Provide Information on Educational and Career Opportunities
- F-5 Assist Students in Applying for Employment or Further Education

Category G: School-Community Relations

- G-1 Develop a School-Community Relations Plan for Your Vocational Program
- G-2 Give Presentations to Promote Your Vocational Program
- G-3 Develop Brochures to Promote Your Vocational Program
- G-4 Prepare Displays to Promote Your Vocational Program
- G-5 Prepare News Releases and Articles Concerning Your Vocational Program
- G-6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
- G-7 Conduct an Open House
- G-8 Work with Members of the Community
- G-9 Work with State and Local Educators
- G-10 Obtain Feedback about Your Vocational Program

Category H: Vocational Student Organization

- H-1 Develop a Personal Philosophy Concerning Vocational Student Organizations
- H-2 Establish a Vocational Student Organization
- H-3 Prepare Vocational Student Organization Members for Leadership Roles
- H-4 Assist Vocational Student Organization Members in Developing and Financing a Yearly Program of Activities
- H-5 Supervise Activities of the Vocational Student Organization
- H-6 Guide Participation in Vocational Student Organization Contests

Category I: Professional Role and Development

- I-1 Keep Up to Date Professionally
- I-2 Serve Your Teaching Profession
- I-3 Develop an Active Personal Philosophy of Education
- I-4 Serve the School and Community
- I-5 Obtain a Suitable Teaching Position
- I-6 Provide Laboratory Experiences for Prospective Teachers
- I-7 Plan the Student Teaching Experience
- I-8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

- J-1 Establish Guidelines for Your Cooperative Vocational Program
- J-2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
- J-3 Enroll Students in Your Co-Op Program
- J-4 Secure Training Stations for Your Co-Op Program
- J-5 Place Co-Op Students on the Job
- J-6 Develop the Training Ability of On-the-Job Instructors
- J-7 Coordinate On-the-Job Instruction
- J-8 Evaluate Co-Op Students' On-the-Job Performance
- J-9 Prepare for Students' Related Instruction
- J-10 Supervise an Employer-Employee Appreciation Event

Category K: Implementing Competency-Based Education (CBE)

- K-1 Prepare Yourself for CBE
- K-2 Organize the Content for a CBE Program
- K-3 Organize Your Class and Lab to Install CBE
- K-4 Provide Instructional Materials for CBE
- K-5 Manage the Daily Routines of Your CBE Program
- K-6 Guide Your Students Through the CBE Program

Category L: Serving Students with Special/Exceptional Needs

- L-1 Prepare Yourself to Serve Exceptional Students
- L-2 Identify and Diagnose Exceptional Students
- L-3 Plan Instruction for Exceptional Students
- L-4 Provide Appropriate Instructional Materials for Exceptional Students
- L-5 Modify the Learning Environment for Exceptional Students
- L-6 Promote Peer Acceptance of Exceptional Students
- L-7 Use Instructional Techniques to Meet the Needs of Exceptional Students
- L-8 Improve Your Communication Skills
- L-9 Assess the Progress of Exceptional Students
- L-10 Counsel Exceptional Students with Personal-Social Problems
- L-11 Assist Exceptional Students in Developing Career Planning Skills
- L-12 Prepare Exceptional Students for Employability
- L-13 Promote Your Vocational Program with Exceptional Students

Category M: Assisting Students in Improving Their Basic Skills

- M-1 Assist Students in Achieving Basic Reading Skills
- M-2 Assist Students in Developing Technical Reading Skills
- M-3 Assist Students in Improving Their Writing Skills
- M-4 Assist Students in Improving Their Oral Communication Skills
- M-5 Assist Students in Improving Their Math Skills
- M-6 Assist Students in Improving Their Survival Skills

RELATED PUBLICATIONS

Student Guide to Using Performance-Based Teacher Education Materials
Resource Person Guide to Using Performance-Based Teacher Education Materials
Guide to the Implementation of Performance-Based Teacher Education
Performance-Based Teacher Education: The State of the Art, General Education and Vocational Education

For information regarding availability and prices of these materials contact—AAVIM, American Association for Vocational Instructional Materials, 120 Driftmier Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586

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ATTACHMENT B

PROFESSIONAL EXCELLENCE IN ARKANSAS
VIA PBTE AND CBAE

Responding to the call for excellence in education, the state of Arkansas now requires that all postsecondary vocational-technical instructors earn certification by participating in a performance-based professional development program. In addition, Arkansas has established a career ladder system that provides incentives and commensurate salaries for teachers as they advance professionally from instructor to senior instructor, to master instructor.

Under the leadership of Dr. J. Barry Ballard, the state director of vocational education, the Vocational and Technical Education Division created a Professional Development Program for Instructors in Postsecondary Vocational-Technical Schools. As part of this program, the Arkansas State Board of Vocational Education approved the establishment of certification requirements and a three-level instructor ranking system for all postsecondary vocational instructors.

This long-range program was instituted to better ensure that Arkansas teachers and administrators are able to meet their goal: helping students achieve their educational and occupational goals. While requirements of the program also include one month of technical work experiences or organized college-level technical training at each of the three instructor levels, the bulk of the certification work comes from completion of the National Center's performance-based teacher education (PBTE) modules.

Arkansas utilizes the PBTE modules for the same reasons that others, nationally and internationally, have successfully used them. To mention a few:

- Training is based on carefully identified teacher competencies.
- The modularized materials allow for self-pacing.
- Criterion-referenced assessments are provided in each module, thus ensuring that competencies are achieved.
- Frequent and immediate feedback is a part of each module.
- Assessment requires demonstration of competencies in actual teaching situations.

Depending upon the professional career level toward which the instructors are working, they will learn to perform competently in a number of the PBTE categories. Upon reaching the master instructor level, an individual will have completed modules and demonstrated competencies in at least the following 10 areas:

- Program planning, development, and evaluation
- Instructional planning

- Instructional execution
- Instructional evaluation
- Instructional management
- Guidance
- School-community relations
- Vocational student organizations
- Professional role and development
- Coordination of cooperative education

In the face of the "technological revolution," additional competencies or whole categories may need to be added to the program. Developers of the PBTE modules continually identify needed changes, have already added 26 new titles to the series, and have revised and updated the original 100 modules. In this way, states using the PBTE materials for vocational teacher training, such as Arkansas, are assured of a solid foundation now and an updating mechanism for years to come.

In addition to use of the PBTE modules for the professional development of its instructors, Arkansas also utilizes the National Center's Competency-Based Vocational Education Administrator Module Series for its vocational administrators' certification program. Under the plan, administrators may complete either approved competency-based administrator education (CBAE) modules or graduate level, competency-based vocational administrator courses at an approved higher education institution.

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The National Center provides guidance and instruction in the adoption and use of the CBAE and PBTE materials. Both sets of materials have been developed by the National Center. The development of the CBAE series is sponsored by the Consortium for the Development of Professional Materials in Vocational Education, a National Center program sponsored by member states. The PBTE series was sponsored by the National Institute of Education, U.S. Department of Education. Contact Dr. Robert E. Norton or Dr. James B. Hamilton, program directors at the National Center, for details regarding the development and use of the PBTE and CBAE materials.

To obtain prices of the PBTE and CBAE materials and other ordering information, contact the American Association for Instructional Vocational Materials (AAVIM); 120 Driftmier Engineering Center; University of Georgia; Athens, Georgia 30602.

ATTACHMENT C

F/PBTE

An Introduction

All teachers of secondary school students in Pennsylvania must hold a valid teaching certificate for the subject area to be taught. For vocational teachers of trade and industrial education programs and for some program areas of agriculture, distributive, and home economics education, the process consists of (1) developing content expertise through years of training and occupational experience and having it verified through a national occupational competency evaluation and (2) completing a 60-credit teacher certification program.

In the past in Pennsylvania, the only method for an aspiring vocational teacher to earn these certification credits was to attend classes at a university or university outreach center on a part-time basis in the evening. This conventional approach tended to emphasize the theory of teaching in general, rather than focusing on the development of specific competencies essential to the role of teacher. In effect, instruction stopped halfway through the learning process, since seldom did the conventional program give the intern (teacher-to-be) an opportunity to demonstrate competence in the skills in an actual classroom/laboratory situation.

Recently, an alternative approach to the conventional method for preparing vocational teachers has been implemented throughout Pennsylvania. The new approach, called field-based, performance-based teacher education (F/PBTE), has brought instruction full cycle, since interns not only are held accountable for knowledge and guided practice, but also must independently apply teacher competencies in an actual teaching situation. With F/PBTE, the classroom at the school where an intern is employed (inservice teacher) or assigned (preservice teacher) becomes the site for delivery of the program. Consequently, travel to a university or university center to obtain vocational professional credit has been greatly reduced.

Following are some questions and answers that will provide additional information on how field-based/performance-based teacher education programs operate.

What Is F/PBTE?

F/PBTE is an approach to preparing teachers that requires the demonstration of teaching skills in an actual classroom situation as evidence that skills have been developed.

Who Does F/PBTE Serve?

Individuals can pursue the 60-credit vocational teacher certification program through one of four Professional Personnel Development Centers established to serve a particular geographic area of the Commonwealth. The

centers, located at Indiana University of Pennsylvania, Pennsylvania State University, Temple University, and the University of Pittsburgh, all offer F/PBTE programs and are capable of serving students (interns) on either a preservice or inservice basis. Preservice interns are those individuals who are interested in earning a teaching certificate prior to gaining employment as a teacher. Inservice interns are those individuals who have been hired to teach directly from industry, without any previous professional preparation. They are employees (teachers) of the district.

What Are Teacher Competencies?

A teacher competency is defined as the knowledge, skills, and attitude necessary to perform a critical teaching task (e.g., use oral questioning techniques). Teacher competencies identified through national studies, as well as competencies identified through state and local efforts, are included in the teacher education programs at each center.

What Methods of Instruction Are Utilized in an F/PBTE Program?

F/PBTE is basically an individualized learning system. Because the professional role of teacher has been analyzed to identify specific teacher competencies, programs can be personalized to fit the learner's unique individual needs. And because each learner is unique, there is no one best method; rather, all methods can be used, depending upon which is most appropriate for the learner.

F/PBTE programs in Pennsylvania utilize a variety of methods including (1) directed, individualized instruction, (2) instructional modules, (3) differentiated staffing, (4) team teaching, (5) helpful supervision, (6) self-evaluation, (7) television, (8) criterion-referenced measurement, and (9) assessment in the actual school situation.

How Are Modules Used in the F/PBTE Program?

A module is a self-contained learning packet that addresses one particular teaching skill. One hundred modules developed at the National Center for Research in Vocational Education at The Ohio State University, plus some additional modules developed through state and local efforts, are utilized by the four centers.

Each module contains a number of learning experiences, which are arranged to lead the learner from an awareness/knowledge level, through guided practice, and on to independent performance of the skill in an actual classroom situation.

Although some learners can use modules as self-instructional materials, most need help in using them. For this reason, modules are considered to be directed, individualized instructional materials, and learners are assisted by the F/PBTE program staff when using them.

Performance is evaluated according to the objective criteria on the teacher performance assessment form (TPAF) in the back of each module. If the performance does not meet criteria, the intern "recycles" through the learning experiences until the skill is mastered. Modules enable learners to progress at their own pace; consequently, progress through a PBTE program is based upon achievement of competencies rather than on time or course completion.

What Is Individualized Learning?

Individualized learning does not mean "self-instruction." It means assisting learners to progress at a rate that is consistent with personal ability and motivation. With F/PBTE, progress through a program is based upon a learner's ability to perform teacher competencies rather than on time or course completion.

Are There Any Group Instructional Activities?

Each F/PBTE program is highly individualized; nevertheless, interns also engage in group instructional activities. This is achieved through seminars or small-group meetings, which are held regularly to bring together interns and staff to discuss contemporary issues and concerns.

Who Are the Helpers in the Learning Process?

Interns in an F/PBTE program are visited on a regular basis by a university representative known as a field resource person (FRP). The FRP functions to facilitate learning by observing actual classroom/laboratory teaching and assisting the intern teachers in evaluating their own performance.

In addition, each intern receives help on a daily basis from a master teacher at the school where he/she is employed or assigned. This "in-house" helper assists learners before or after school or during the time that has been scheduled for helping activities.

At most of the professional development centers, the FRP and local master teacher are joined by a senior university faculty member who serves as the instructional team leader. Generally, the senior faculty member also serves as the intern's official advisor.

How Will a Learner's Competency Development Be Evaluated?

Self-evaluation is a valuable feature of an F/PBTE program. Interns are brought to realize that feedback is essential to their professional skill development and are required to self-evaluate individual performance prior to receiving feedback from a staff member. Learners use the specified criteria stated on the TPAF in the back of each module and videotaped feedback to facilitate self-evaluation.

Regardless of whether an intern progresses through all module learning experiences or exercises a "test-out" option, final performance must meet the stated criteria. This judgment is first made by the learner through self-evaluation and then confirmed by the FRP. If performance does not meet criteria, the intern is recycled through the learning process to improve performance. After practice, the skill is demonstrated and reevaluated. When learners can perform as specified by the criteria and standards, they are considered competent in the skill addressed.

What are the Final Exit Requirements in the F/PBTE Program?

Each of Pennsylvania's four centers has established criteria that must be achieved in order to exit from an F/PBTE program. Evidence of individual skill development, as well as evidence that the skills are routinely used to teach complete lessons, is collected. Assessment of the learner's competence is based on his or her performance in the teaching role.

Taken from a brochure developed by Thomas J. Walker and Jane A. Whisner of Indiana University of Pennsylvania.

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